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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,083	08/21/2006	Elias Bitar	4590-558	4164
33308 7590 06/24/2009 LOWE HAUPTMAN & BERNER, LLP 1700 DIAGONAL ROAD, SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
BROADHEAD, BRIAN J				
ART UNIT		PAPER NUMBER		
3664				
MAIL DATE		DELIVERY MODE		
06/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,083

Applicant(s)

BITAR ET AL.

Examiner

BRIAN J. BROADHEAD

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 3-30-09, 8-21-06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1-7 are objected to because of the following informalities: The claims are very difficult to read as worded. This may be because the invention is attempting to define an apparatus through method steps (as noted below). Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: any structure of the device to perform what is discussed. The claims are all directed to an apparatus, yet the limitations are steps and actions taken.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite an apparatus but fail to disclose any structure. The claims, as currently, written improperly span two classes of patentable subject matter because it is a apparatus claimed only though the steps the device takes.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Conner et al., 6292721.

7. Conner et al. disclose extracting from a topographic database a map formed from the projection on the horizontal of a stack of terrain strata of the region overflown, corresponding to terrain sections with mainly horizontal profile, wherein the terrain sections with mainly horizontal profile are referenced with respect to an absolute altitude that is greater than that of the highest surrounding relief, which absolute altitude is termed the safety altitude in figures 7-10; when the topographic map is extracted from a topographic database storing the altitudes of a mesh of points of a zone of the terrestrial surface enclosing the region overflown, the safety altitude is deduced from the minimum local safety altitudes assigned to the points of the mesh of the topographic database in figures 7-10; the safety altitude is deduced from the minimum local safety altitudes assigned to the points of the mesh of the topographic database belonging, in

the region overflown, to a so-called emergency descent zone , related to the current position of the aircraft and containing probable trajectories predicted for an aircraft following a maximum imposed descent slope in figures 7-10; wherein the value of the safety altitude is extracted from the distribution, as a function of their values, of the minimum local safety altitudes assigned to the points of the mesh of the topographic database belonging, in the region overflown, to the emergency descent zone and corresponds to the maximum value of the minimum local safety altitudes appearing in this distribution after clipping of a certain percentage of the largest values of minimum local altitudes that it contains. the terrain strata represented correspond to terrain sections along horizontal profiles in figures 7-10; when the aircraft is at an altitude greater than the safety altitude with respect to which the terrain strata represented are referenced, the terrain strata represented correspond to terrain sections along mainly horizontal elbowed profiles reducing, by vertical translation, to a broken line starting with a first straight line segment with negative slope going from the current position of the aircraft up to the level of the safety altitude and continuing as a second horizontal straight line segment, the negative slope angle of the first straight line segment is taken equal to the most negative slope angle from among the angle of the current slope followed by the aircraft, the maximum descent slope angle permitted for the aircraft and the arc tangent of the ratio between the ground speed of the aircraft and a maximum descent speed permitted for the aircraft. when the aircraft is below the safety altitude with respect to which the terrain strata represented are referenced, the terrain strata represented correspond to horizontal sections in figures 11-13; wherein the colors

and/or textures associated with the levels of terrain strata in a map displayed correspond to the same risk scale as that associated with the colors and/or textures of a visual alarm map originating from a ground proximity warning system on lines 33-40, on column 23; the colors associated with the terrain strata represented, situated below the altitude of the aircraft belong to the green interval; the colors associated with the terrain strata represented, situated at levels close to the current altitude of the aircraft, belong to the yellow interval. the color associated with the terrain strata represented, situated above the altitude of the aircraft is red. , when the aircraft is equipped with a ground proximity warning system producing visual alarm maps pinpointing threatening reliefs or obstacles on the ground, the colors and/or textures associated with the levels of terrain strata represented in a relief map displayed by said device comply with the same risk scale as those of the visual alarm maps and in that it comprises a superposition circuit superimposing the visual alarm maps on the map of the relief which appears as background around threatening reliefs and obstacles on the ground on line 32, on column 23, through line 61 on column 38; wherein when the aircraft is equipped with a ground proximity warning system producing visual alert and alarm maps pinpointing threatening reliefs and obstacles on the ground and distinguishing them by different colors and/or textures as a function of the short- or medium-term character of the threat that they pose, the color and/or texture associated, in an alarm and alert map, with a relief or obstacle on the ground giving rise to a short-term threat are borrowed for a terrain stratum level represented situated at an altitude greater than that of the aircraft and the color and/or the texture associated with a relief or an obstacle on the ground

giving rise to a medium-term threat are borrowed for a terrain stratum level represented situated at the altitude of the aircraft on line 32, on column 23, through line 61 on column 38.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN J. BROADHEAD whose telephone number is (571)272-6957. The examiner can normally be reached on Monday through Thursday or Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian J. Broadhead/

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